Chapter 3

Base Structure and Conditions

The Commission considered the military value of an installation in terms of how well it met the mission-related needs of the units or activities located there. As the Commission proceeded with its evaluation of the base structure, it addressed a number of factors that contribute to military value. Natural physical factors such as expanse and type of terrain, geographic location, and weather can be of utmost importance. Other factors are found in the nature of the relationship between an installation and its surrounding community. The condition of base facilities, along with their current and potential capacity, also affects military value.

Physical Factors

The size and location of military installations were significant considerations in the Commission's analysis, since they are often directly related to the ability of an installation to support current and projected missions, and are also major factors in its ability to accept additional units and missions resulting from a reorganization of the base structure. In the course of its deliberations, the Commission developed an acute concern about the requirement of the armed forces for adequate training areas. Modern tactical doctrine, taking advantage of vastly improved equipment capabilities, calls for greatly increased mobility for the operational units of all Services. The areas of operational responsibility for modern units dwarf those of yesterday's forces. For instance, today an Army mechanized battalion needs more than 80,000 acres to practice standard maneuvers; its World War II predecessor required fewer than 4,000.

The increasing sophistication and extended ranges of modern weapons continually increase the requirements for training areas. Today, the high speed of modern tactical aircraft means that even large ground ranges are overflown in a matter of seconds, so that ranges that might have been perfectly adequate ten or more years ago are now too small. The five nautical miles required by a World War II fighter aircraft for aerial maneuver have grown to 40 miles today. With the advent of the Advanced Tactical Fighter, that requirement will expand to between 80 and 100 nautical miles. There is also an emerging need for a new kind of range, one capable of accommodating the full and free use of electronic-warfare devices without impairing normal private and commercial use of the electromagnetic spectrum.

Furthermore, the increasing emphasis on joint and combined-arms operations expands the requirement for large training areas, such as the National Training Center at Fort Irwin, California. In the past, the Services have been able to augment their training areas by using other federal lands, such as national forests, under agreements with various custodians. That option is becoming increasingly constrained because of the growing body of legislation that places greater limits on the use of federal land. The Commission notes in passing

that Soviet forces have at their disposal vast training areas in which to practice large-unit maneuvers.

The foregoing demonstrates clearly the need for the Department of Defense to pursue vigorously the acquisition of large tracts of land in sparsely populated regions for the purpose of ground and air training.

Realistic training also requires access to varied terrain. Marine Corps units practicing amphibious operations need beach landing sites with appropriate tides and supporting soil, relatively free of vegetation. Low-level helicopter flight training must be conducted over rolling, forested terrain in order to build pilot proficiency. The soil over which armored and mechanized-infantry units maneuver must be stable enough to support heavy vehicles. Light-infantry units require less space but more variety in terrain, while airborne units need parachute-landing zones and good weather conditions to maintain their proficiency.

Such considerations will loom even larger in the future. The pace of technological change is increasing, and the trend toward higher-mobility forces with ever-more-lethal weapons can be expected to accelerate. While simulation techniques are useful in meeting some training requirements, particularly for individual skill development, unit proficiency can only be attained through "real life" exercises.

Although location has an effect on the military value of any given installation, in certain instances a specific location is a prerequisite to mission accomplishment. For example, despite the higher land values associated with such locations, the Navy needs deep-water ports with access to the ocean, while the Marine Corps mission to conduct over-the-shore operations requires access to beachfront training areas.

The ability of a military base to survive in a nuclear environment is also of clear military value. Years ago, the range and speed of strategic bombers dictated their stationing near the coasts to put overseas strategic targets within their reach. Technology has since extended effective ranges, and the survivability of U.S. strategic-bomber bases, given the presence of missile-equipped Soviet submarines off our coasts, has now become a prime consideration in locating those bases farther inland. Another consideration governing remote location of these bases is the requirement for low-level bomber routes, which has been extended to between 500 and 700 nautical miles.

Weather can be another important basing consideration, particularly in the case of flight training and operations, but also for other outdoor operational and training activities. In addition, special climatic conditions may be desirable for training specialized units or for research, development, and testing of equipment.

Encroachment

Despite the relatively large land area of the United States, there is often an intense competition for desirable areas. The encroachment of civilian activities on military installations has an effect on operations. Our nation's demographic evolution has been marked by a shift of population from the Northeast toward the South and West. This trend has accelerated in the last fifty years, so that bases that once were remote and isolated are now engulfed by urban development. This has constrained the growth potential of many established bases, reduced their ability to conduct training and other operations, and impeded, in some

instances, efforts to consolidate units or functions. In many parts of the country, a growing competition for valuable land has pitted local interests against military requirements. This has been particularly evident near deep-water ocean ports. Aside from the facilities supporting current port operations, additional land for the staging of personnel and equipment is required for mobilization. As the development of civilian communities around ports has occurred, this capability has been restricted.

The Commission has found that the encroachment problem is particularly acute for military flight operations. Air bases across the country are confronted with airspace extremely congested by commercial and private aviation, a situation exacerbated by the desire of local municipalities for noise abatement and limited night operations.

Condition of Facilities

Another factor with a direct impact on military value is the condition of base facilities. Substandard base facilities hurt military effectiveness in both operational and human terms. In their visits to military installations, the Commissioners were struck by the number of deteriorating facilities. The continued presence of large numbers of wooden buildings erected during World War II and designed to stand for ten years at most is but one example. The data on individual installations provided by the Services showed that antiquated structures are common and are not restricted to any single Service or mission area. While recognizing that military-construction projects compete for funds with other national defense requirements, the Commission encourages the Department of Defense and the Congress to consider the adverse impact that inadequate living and working conditions have on the performance and retention of personnel.

Under ideal conditions, the Department of Defense would be able to design a base structure from the ground up, taking into consideration the mission-related requirements of its forces. Reality requires that any comprehensive basing proposal begin with the base structure that already exists, one that has developed over many years in response to a variety of circumstances.

In fact, the design of the current base structure strongly reflects the practice of adapting existing facilities to new purposes. When a new basing requirement arises, the first response ordinarily is to determine whether it can be met with an existing base. This response is partly conditioned by economic considerations, since existing bases already represent significant sunk costs. It is usually more economical to station a new unit on an existing base that may have some unused space, and pay the incremental costs, than to acquire a large tract of land at current, higher prices and build a complete infrastructure at a new location.

Given the impediments to creating a base structure on purely rational grounds, it is all the more remarkable to learn, as the Commission has, that the current base structure, while not ideal in all particulars, generally meets the mission-related needs of the Armed Services in the context of their current force structure. The shortcomings are of degree, not of kind. On that basis, the task of the Commission with regard to base realignment and closure was primarily one of adjustment, particularly in those cases where the Commission's action was based on excess capacity.